Curriculum Vitae

Jeffrey William Byng

Eastman Kodak Company,
3500 Eglinton Ave. West
Toronto, ON M6M 1V3
FAX: (416) 766-4487
e-mail: jbyng@kodak.com

Personal

Date/Place of Birth: ---
Citizenship: ---

Education

Ph.D. Imaging Research, Medical Biophysics
University of Toronto, ---
Thesis title: "Mammographic densities and risk of breast cancer"
Supervisor: ---

Awards: University of Toronto Open Fellowship (2 years)

M.Sc. Imaging Research, Medical Biophysics
University of Toronto, ---
Thesis title: "Quantitative analysis of mammographic images"
Supervisor: ---

Awards: Ontario Graduate Scholarship (2 years)
Natural Sciences & Engineering Research Council Scholarship (2 years)

B.A.Sc. Honours, Engineering Science, Physics
University of Toronto, ---.

Awards: JW Billes Admission Scholarship, University of Toronto (4 years)
Life Sciences Research Fellowship, University of Toronto

Memberships

American Association of Physicists in Medicine (AAPM)

Canadian Organization of Medical Physicists (COMP)

Summary of skills

Product Development, Commercialization, Management

- Strategy development and implementation
- Product technology roadmaps
- Customer needs analysis
- Value proposition & vectors of differentiation
- Product positioning
- Technical & product communications
- Building/managing teams
- Acquisitions, alliances & partnerships
- Life cycle management
- Competitive analysis
- Analysis of market size, drivers, growth
- Product launch
- Internal and end-user training
- Business case development

Work Experience

2003- General Manager, Digital Mammography
Health Imaging, Eastman Kodak Company

Strategy and business development for digital mammography solutions

2001-2003 Portfolio Manager, Digital Mammography Systems
Health Imaging, Eastman Kodak Company

Develop, co-ordinate and implement the product development and implementation strategy for the range of products and components in a digital mammography systems solution.

2000-2001 Product Line Manager, Digital Mammography
Health Imaging, Eastman Kodak Company

Develop, co-ordinate and implement the strategy for the product development and commercialization of specific components of digital mammography systems.

1998- Medical Physicist
Health Imaging, Eastman Kodak Company

Provide internal technical and communications support to product development and business management teams particularly in the area of mammography and digital mammography. Evaluate external standards, regulations and guidance on mammography and digital mammography products

1997-1998 Research Engineer
Imaging Research, Medical Biophysics, University of Toronto
Sunnybrook Health Science Centre, Toronto ON

Research into techniques for quantitative image analysis of mammographic images. Co-ordinate research for implementation of quantitative analysis of mammographic images in breast cancer etiology studies.

Research Highlights

- Confirmed the very strong association between fibro-glandular density in the mammographic image and risk of breast cancer.
- Developed the first computer based interactive system for predicting risk of breast cancer from the quantitative analysis of mammographic images.
- Developed an automated system for predicting risk of breast cancer from the quantitative analysis of mammographic images.
- Applied quantitative analysis of mammographic images to investigate the effectiveness of potential preventive strategies for breast cancer
- Applied quantitative analysis of mammographic images to investigate the causes the causes of breast cancer.
- Developed an algorithm to optimize display of digital mammographic images both in soft and hard copy.

Published Papers

1. Yaffe MJ, Byng JW, Caldwell CB, Bennett NR. Anthropomorphic radiological phantoms for mammography. *Med Prog through Tech* 1993;19:23-30.

2. Byng JW, Boyd NF, Fishell E, Jong RA, Yaffe MJ. The quantitative analysis of mammographic densities. *Phys Med Biol* 1994;39:1629-38.

3. Boyd NF, Byng JW, Jong RA, Fishell EK, Little LE, Miller AB, Lockwood GA, Tritchler DL, Yaffe MJ. Quantitative classification of mammographic densities and breast cancer risk: Results from the Canadian National Breast Screening Study. *J Natl Cancer Inst* 1995;87: 670-675.

4. Boyd NF, Connelly P, Byng J, Yaffe M, Draper H, Little L, Jones D, Martin LJ, Lockwood G, Tritchler D. Plasma lipids, lipoproteins, and mammographic densities. *Cancer Epidemiology, Biomarkers & Prevention* 1995;4:727-33.

5. Byng JW, Boyd NF, Fishell E, Jong RA, Yaffe MJ. Automated analysis of mammographic densities. *Phys Med Biol* 1996;41:909-23.

6. Byng JW, Boyd NF, Little L, Lockwood G, Fishell E, Jong RA, Yaffe MJ. Symmetry of projection in the quantitative analysis of mammographic images. *European Journal of Cancer Prevention* 1996:5:319-327.

7. Graham SJ, Bronskill MJ, Byng JW, Yaffe MJ, Boyd NF. Quantitative correlation of breast tissue parameters using magnetic resonance and X-ray mammography. *Br J Cancer* 1996;73:162-168.

8. Boyd NF, Greenberg C, Lockwood G, Little L, Martin L, Byng J, Yaffe M, Tritchler D. The effects at 2 years of a low-fat high-carbohydrate diet on radiological features of the breast: results from a randomized trial. *J Natl Cancer Inst* 1997;89:488-96.

9. Byng JW, Critten JP, Yaffe MJ. Thickness equalization processing of mammographic images. *Radiology* 1997;203:564-568.

10. Byng JW, Yaffe MJ, Lockwood G, Little L, Tritchler D, Boyd NF. Automated analysis of mammographic densities and breast cancer risk. *Cancer* 1997:80;66-74.

11. Byng JW, Mainprize JG, Yaffe MJ. X-ray characterisation of breast phantom materials. *Phys Med Biol* 1998;43:1367-1377.

12. Boyd NF, Lockwood GA, Byng JW, Little LE, Yaffe MJ, Tritchler DL. The relationship of anthropmetric measures to radiological features of the breast in premenopausal women. *British Journal of Cancer* 1998;78, 1233-1238.

13. Byng, JW, Yaffe MJ, Jong RA, Shumak RS, Lockwood GA, Tritchler DL, Boyd NF. Analysis of mammographic density and breast cancer risk from digitized mammograms. *Radiographics* 1998;18;1587-1598.

14. Boyd NF, Lockwood GA, Byng JW, Tritchler DL, Yaffe MJ. Mammographic densities and breast cancer risk. *Cancer Epidemiology, Biomarkers & Prevention* 1998;7:1133-1144.

15. Yaffe MJ, Boyd NF, Byng JW, Jong RA, Fishell E, Lockwood GA, Tritchler DL. Breast cancer risk and measured mammographic density. *European Journal of Cancer Prevention* 1998;7:S47-S55.

16. Knight JA, Martin LJ, Greenberg CV, Lockwwod, GA, Byng JW, Yaffe MJ, Tritchler DL, Boyd NF. Macronutrient intake and change in mammographic density at menopause: results from a randomized trial. *Cancer Epidemiology, Biomarkers & Prevention* 1999;8:123-128.

17. Boyd NF, Lockwood GA, Martin LJ, Knight JA, Jong RA, Fishell E, Byng JW, Yaffe MJ, Tritchler DL. Mammographic densities and risk of breast cancer among subjects with a family history of this disease. *J Natl Cancer Inst* 1999;91:1404-1408.

18. Boyd NF, Lockwood GA, Martin LJ, Byng JW, Yaffe MJ, Tritchler DL. Mammographic density as a marker of susceptibility to breast cancer: a hypothesis. IARC Sci Publ 2001;154:163-9

Proceedings

1. Byng JW, Yaffe MJ, Little LE, Lockwood G, Jong RA, Fishell E, Tritchler D, Boyd NF. Risk assessment from automated feature analysis of digitized mammograms. In: Van Metter RL,

Beutel J, eds. Physics of Medical Imaging 1995 February 26-27, San Diego: Proceedings of the Society of Photo-Optical Instrumentation Engineers 1995; 2432:103-113.

2. Byng JW, Critten JP, Boyd NF, Little L, Lockwood G, Jong RA, Fishell E, Tritchler D, Yaffe MJ. Analysis of digitized mammograms for the prediction of breast cancer risk. In: Doi K, Giger ML, Nishikawa RM, Schmidt RA, eds. Proceedings of the third international workshop on digital mammography; 1996 June 9-12; Chicago: Elsevier Science B.V., 1996:185-90.

Book Chapters

1. Boyd NF, Martin LJ, Lockwood GA, Greenberg C, Tritchler DL, Byng JW, Yaffe MJ. "Dietary fat and breast cancer risk." In: Fentiman IS ed. Challenges in Breast Cancer (Blackwell Science, London), 1999.

2. --- (in press).

Articles

1. Byng JW, Hasselkus JA. How to evaluate Full-Field Digital Mammography Systems *Radiology Management* 1999;219(6): 8-11.